

What is claimed is:

1. A vehicle navigation method for guiding path of a complex intersection, comprising the steps of:

generating a node and a link sequence from a path searching data;

extracting a terminal sharing node and link by comparing the node and link sequence with a map for terminal;

reconstructing a path guidance data of the complex intersection by using the extracted sharing node and link;

performing a map matching and a path following in a drive state on the basis of the reconstructed data; and

providing the followed path guidance information to a user.

2. The vehicle navigation method of claim 1, wherein the path searching data is provided from an external server or a self-system.

3. The vehicle navigation method of claim 1, wherein the reconstruction of the path guidance data is carried out by reconstructing a node and a link data of the complex intersection.

4. The vehicle navigation method of claim 1, wherein the

step of reconstructing the path guidance data comprises the steps of:

performing a grouping by using the sharing node and link of the complex intersection; and
patterning the grouped complex intersection.

5. The vehicle navigation method of claim 4, wherein the grouping step comprise the steps of:

defining a complex intersection configuration node of a navigation numeric map;

grouping the extracted sharing node by using the defined intersection name attribute; and

if a connectivity between the grouped nodes is secured, judging the complex intersection as a nodeset.

6. The vehicle navigation method of claim 5, wherein each node of the complex intersection has the same name.

7. The vehicle navigation method of claim 4, wherein the step of performing the grouping by using the link of the complex intersection comprises the steps of:

defining a complex intersection configuration link of a navigation numeric map;

grouping the extracted link by using a defined intra-intersection link attribution; and

judging a link, which is not the intra-intersection link among the grouped links, as a connection link.

8. The vehicle navigation method of claim 4, wherein the step of patterning the grouped complex intersection comprises the steps of:

indexing nodes of the grouped complex intersection;

extracting a connection angle of a connection link coupled in a progressing direction of the indexed node;

integrating the complex intersection connection links by using the extracted connection angle; and

adding a special intersection attribute to the integrated complex intersection.

9. The vehicle navigation method of claim 1, wherein the path guidance information is provide on a screen and by a voice.

10. A vehicle navigation apparatus for guiding path of complex intersection, comprising:

means for generating a node and a link sequence from a path searching data;

means for extracting a terminal sharing node and link by comparing the node and link sequence with a map for terminal;

means for reconstructing a path guidance data of the complex intersection by using the extracted sharing node and link;

means for performing a map matching and a path following during a drive state on the basis of the reconstructed data; and

means for providing the followed path guidance information to a user.

11. The vehicle navigation apparatus of claim 10, wherein the path searching data is provided from an external server or a self-system.

12. The vehicle navigation apparatus of claim 10, wherein the reconstruction of the path guidance data is carried out by reconstructing a node and a link data of the complex intersection.

13. The vehicle navigation apparatus of claim 10, wherein the means for reconstructing the path guidance data comprises:

means for performing a grouping by using the sharing node and link of the complex intersection; and

means for patterning the grouped complex intersection.

14. The vehicle navigation apparatus of claim 13, wherein the means for performing the grouping comprises:

means for grouping the extracted sharing node by using a defined intersection name attribute; and

means for judging the complex intersection as a nodeset if a connectivity between the grouped nodes is secured.

15. The vehicle navigation apparatus of claim 14, wherein each node of the complex intersection has the same name.

16. The vehicle navigation apparatus of claim 13, wherein the means for performing the grouping comprises:

means for grouping the extracted link by using a defined intra-intersection link attribution; and

means for judging a link, which is not the intra-intersection link among the grouped links, as a connection link.

17. The vehicle navigation apparatus of claim 13, wherein the means for patterning the grouped complex intersection comprises:

means for indexing nodes of the grouped complex intersection;

means for extracting a connection angle of a connection

link coupled in a progressing direction of the indexed node;
means for integrating the complex intersection connection links by using the extracted connection angle; and
means for adding a special intersection attribution to the integrated complex intersection.

18. A vehicle navigation system comprising:
a server for transmitting path data searched from a remote geographic/traffic information;
means for receiving the searched path data from the server;
means for receiving an information on a current vehicle position from a GPS satellite;
means for extracting a drive information of the vehicle by using the received information on the vehicle position;
a storage means having a geographic information stored therein;
a path searching means for searching the geographic information stored in the storage means; and
a guiding means for reconstructing path guidance data of the complex intersection by using the path data provided from the server and the path searching means to thereby perform a path guidance and provide a path information..